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## OM nucleic - nucleic search, using sw model

Run on: September 12, 2002, 09:41:26 : Search time 99.3 Seconds

(without alignments)  
4435.256 Million cell updates/sec

Title: US-09-719-017a-2

Perfect score: 1793

Sequence: 1 gattcccttggtgacatca.....caattactcaatgcgcgcg 1793

Scoring table: IDENTITY\_NUC

Gapop 10.0, Gapext 1.0

Searched: 383533 seqs, 122816752 residues

Total number of hits satisfying chosen parameters: 767066

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result	No.	Score	Query Match	Length	ID	Description
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	2	404	22.5	5110	1	US-08-106-433A-4
	3	404	22.5	5110	1	US-08-106-433A-5
	4	404	22.5	5110	1	US-08-106-433A-6
	5	404	22.5	5110	1	US-08-106-433A-7
	6	404	22.5	5110	1	US-08-106-433A-8
	7	404	22.5	5110	1	US-08-106-433A-9
	8	404	22.5	5110	1	US-08-106-433A-10
	9	404	22.5	5110	1	US-08-106-433A-11
	10	404	22.5	5110	1	US-08-106-433A-12
	11	404	22.5	5110	1	US-08-106-433A-13
	12	404	22.5	5110	1	US-08-106-433A-14
	13	404	22.5	5110	1	US-08-106-433A-15
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	15	332.8	18.6	4476	4	US-09-498-599-2
	16	332.8	18.6	4593	4	US-08-801-344-1
	17	332.8	18.6	4593	4	US-09-498-599-1
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	19	332.8	18.6	7475	3	US-09-096-570-1
	20	328.6	18.3	1097	3	US-08-761-258-7
	21	328.6	18.3	1097	2	US-08-977-306-7
	22	328.6	18.3	3301	2	US-08-447-430A-42
	23	328.6	18.3	3423	2	US-08-447-430A-40
	24	328.6	18.3	3423	4	US-09-485-737B-86
	25	328.6	18.3	3474	2	US-08-447-430A-41
	26	328.6	18.3	3474	2	US-08-318-837-10
	27	328.6	18.3	4009	2	US-08-500-860A-2

28	328.6	18.3	5238	6	5453363-1	Patent No. 5453363
29	328.6	18.3	6312	2	US-08-531-601-3	Sequence 3, Appl
30	328.6	18.3	6312	1	US-08-859-032-3	Sequence 3, Appl
31	328.6	18.3	8430	4	US-09-131-028A-6	Sequence 6, Appl
32	328.6	18.3	8430	4	US-09-131-028A-10	Sequence 10, Appl
33	290.8	16.2	4296	5	US-08-316-950-15	Sequence 15, Appl
34	290.8	16.2	4296	5	PCT-US95-12642-15	Sequence 15, Appl
35	290.8	16.2	4352	1	US-08-316-950-16	Sequence 16, Appl
36	290.8	16.2	4352	5	PCT-US95-12642-16	Sequence 16, Appl
37	290.8	16.2	6047	1	US-08-316-950-12	Sequence 12, Appl
38	290.8	16.2	6047	5	PCT-US95-12642-12	Sequence 12, Appl
39	267.4	14.9	1035	2	US-08-690-493-2	Sequence 2, Appl
40	267.4	14.9	1200	2	US-08-690-493-3	Sequence 3, Appl
41	225.2	12.6	665	4	US-09-214-214A-12	Sequence 12, Appl
42	225.2	12.6	665	4	US-09-255-953-9	Sequence 9, Appl
43	222.4	12.4	469	2	US-08-647-368A-1	Sequence 1, Appl
44	213.2	11.9	663	4	US-09-214-214A-11	Sequence 11, Appl
45	213.2	11.9	663	4	US-09-255-953-8	Sequence 8, Appl

## ALIGNMENTS

RESULT 1  
US-08-106-433A-3  
Sequence 3, Application US/08106433A  
Patent No. 5385834  
GENERAL INFORMATION:  
APPLICANT: Richard A. Ikeda  
TITLE OF INVENTION: Mutant T7 RNA Polymerase GPl(Lys222)  
TITLE OF INVENTION: Exhibiting Altered Promoter Recognition  
NUMBER OF SEQUENCES: 23  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Deveau, Colton, and Marguis  
STREET: Two Midtown Plaza, Suite 1400,  
STREET: 1360 Peachtree St., NE  
CITY: Atlanta  
STATE: Georgia  
COUNTRY: USA  
ZIP: 30309  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.50 inch, 1.4 Mb Storage  
COMPUTER: Apple Macintosh  
OPERATING SYSTEM: Macintosh 7.1  
SOFTWARE: Microsoft Word 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/106,433A  
FILING DATE: 08/13/93  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: No. 5385834 Applicable  
FILING DATE: No. 5385834 Applicable  
ATTORNEY/AGENT INFORMATION:  
NAME: Deveau, Colton, and Marguis  
NAME: Colton, Laurence P.  
REGISTRATION NUMBER: Reg. No. 5385834 33, 371  
REFERENCE/DOCKET NUMBER: 10733-161  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 404-875-8817  
TELEFAX: 404-875-8505  
INFORMATION FOR SEQ ID NO: 3:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 5096 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: circular  
MOLECULE TYPE: other nucleic acid  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
FRAGMENT TYPE: No. 5385834 applicable  
ORGANISM: No. 5385834 applicable  
STRAIN: No. 5385834 applicable





Query Match 22.5%; Score 404; DB 1; Length 5110;  
Best Local Similarity 96.5%; Pred. No. 8.9e-91;  
Matches 413; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

QY 1267 agagtcgactgcaagatgcaagcttggtcccaactgacccatccgaactcgaagaag 1336  
DB 1251 AGAATTTGCTGGCGGAGTAGCCGGTGGTCCCTGACCTGACCCCATCCGAACACGAGAAG 1310  
QY 1327 tgaacgcgctagcgcgcagatgtagtgtaggtctcccaactgcaagatggaactgccc 1386  
DB 1311 TGAACGCCCTAGCGCGGATGTAAGTGTGGGTCTCCCATGCGAGAGTAGGAACTGCC 1370  
QY 1387 aggcatacaataaagcaagagctcagtcgaagaactgggaccttggtttatctgttgc 1446  
DB 1371 AGGCATCAATAATAAACCAAGAGCTCACTCGAAGACATGGGCTTTTCCTTTATCTGTTGT 1430  
QY 1447 ttgtcgtagaagctctcccgagtagaagaacaatccgcgcggagaggtttgaacgttcgc 1506  
DB 1431 TTGTCGGTGAACGCTCTCTCTGAGTAGGACAAATCCGCCGGAGCGATTGAAACGTTGCG 1490  
QY 1507 aagcaacgcgcgcgaggtgtagcgagcgagcgcgcacataaacctgcgaagcatcaaat 1566  
DB 1491 AAGCAACGCCCGGAGGAGGTGGCGGCGAGACGCCCGCATTAACCTGCCAGGACATCAATT 1550  
QY 1567 aagcagaagcgcacatcctgacgagatggaccttttgcgttctacaacctcttcctgctc 1626  
DB 1551 AACGAGAAAGCCATCTCTGAGAGTAGGAGCGCTTTTGGCTTTTACAAACTCTTCCGTGCTC 1610  
QY 1627 atactcaagagcatcccccacagagatagagtaactagactcgtttttcatcagagaa 1686  
DB 1611 ATATCTCAAGCCATCTCCACCAAGATAGGTAAGTACGCTCTTTTGCAATCAGGAAA 1670  
QY 1687 gcacgcat 1694  
DB 1671 GCAAGCTCT 1678

RESULT 4  
US-08-106-433A-6  
Sequence 6, Application US/08106433A  
Patent No. 5385834  
GENERAL INFORMATION:  
APPLICANT: Richard A. Ikeda  
TITLE OF INVENTION: Mutant T7 RNA Polymerase Gp1(Lys222)  
TITLE OF INVENTION: Exhibiting Altered Promoter Recognition  
NUMBER OF SEQUENCES: 23  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Deveau, Colton, and Marquis  
STREET: Two Midtown Plaza, Suite 1400,  
STREET: 1360 Peachtree St., NE  
CITY: Atlanta  
STATE: Georgia  
COUNTRY: USA  
ZIP: 30309  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.50 inch, 1.4 Mb Storage  
COMPUTER: Apple Macintosh  
OPERATING SYSTEM: Macintosh 7.1  
SOFTWARE: Microsoft Word 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/106,433A  
FILING DATE: 08/13/93  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: No. 5385834 Applicable  
FILING DATE: No. 5385834 Applicable  
ATTORNEY/AGENT INFORMATION:  
NAME: Deveau, Colton, and Marquis  
NAME: Colton, Laurence P.  
REGISTRATION NUMBER: Reg. No. 5385834 33,371  
REFERENCE/DOCKET NUMBER: 10733-161  
TELECOMMUNICATION INFORMATION:

TELEPHONE: 404-875-8817  
TELEFAX: 404-875-8505  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 5110 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: circular  
MOLECULAR TYPE: other nucleic acid  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
FRAGMENT TYPE: NO. 5385834 applicable  
ORIGINAL SOURCE: NO. 5385834 applicable  
ORGANISM: NO. 5385834 applicable  
STRAIN: NO. 5385834 applicable  
INDIVIDUAL ISOLATE: NO. 5385834 applicable  
DEVELOPMENTAL STAGE: NO. 5385834 applicable  
HAPLOTYPE: NO. 5385834 applicable  
TISSUE TYPE: NO. 5385834 applicable  
CELL TYPE: NO. 5385834 applicable  
ORGANELLE: NO. 5385834 applicable  
IMMEDIATE SOURCE:  
LIBRARY: NO. 5385834 applicable  
CLONE: PCM-T297  
POSITION IN GENOME:  
CHROMOSOME/SEGMENT: NO. 5385834 applicable  
MAP POSITION: NO. 5385834 applicable  
UNITS: NO. 5385834 applicable  
FEATURE:  
NAME/KEY: Inactive T7 f10 promoter mutant (-11G to T) located between nucl  
LOCATION: 198 to 220  
IDENTIFICATION METHOD: The clone was constructed from  
IDENTIFICATION METHOD: PKR232-8 and the inserted "promoter" was sequenced.  
OTHER INFORMATION: If the mutant T7 promoter between positions 198 and 220  
PUBLICATION INFORMATION:  
AUTHORS: Ikeda, R.A., Chang, L.L., and Marshamane, G.S.  
TITLE: RNA Polymerase Characterization of a Mutant T7  
TITLE: of T7-like Promoters  
JOURNAL: Biochemistry  
VOLUME: 32  
ISSUE: 35  
PAGES: 9115-9124  
DATE: Sept. 7, 1993  
DOCUMENT NUMBER:  
FILING DATE:  
PUBLICATION DATE:  
DOCUMENT NUMBER:  
FILING DATE:  
PUBLICATION DATE:  
RELEVANT RESIDUES IN SEQ ID NO: 1 to 5110  
US-08-106-433A-6

Query Match 22.5%; Score 404; DB 1; Length 5110;  
Best Local Similarity 96.5%; Pred. No. 8.9e-91;  
Matches 413; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

QY 1267 agagtcgactgcaagatgcaagcttggtcccaactgacccatccgaactcgaagaag 1336  
DB 1251 AGAATTTGCTGGCGGAGTAGCCGGTGGTCCCTGACCTGACCCCATCCGAACACGAGAAG 1310  
QY 1327 tgaacgcgctagcgcgcagatgtagtgtaggtctcccaactgcaagatggaactgccc 1386  
DB 1311 TGAACGCCCTAGCGCGGATGTAAGTGTGGGTCTCCCATGCGAGAGTAGGAACTGCC 1370  
QY 1387 aggcatacaataaagcaagagctcagtcgaagaactgggaccttggtttatctgttgc 1446  
DB 1371 AGGCATCAATAATAAACCAAGAGCTCACTCGAAGACATGGGCTTTTCCTTTATCTGTTGT 1430  
QY 1447 ttgtcgtagaagctctcccgagtagaagaacaatccgcgcggagaggtttgaacgttcgc 1506  
DB 1431 TTGTCGGTGAACGCTCTCTCTGAGTAGGACAAATCCGCCGGAGCGATTGAAACGTTGCG 1490



Sequence 8 Application US/08106433A  
Patent No. 5385834  
GENERAL INFORMATION:  
APPLICANT: Richard A. Ikeda  
TITLE OF INVENTION: Mutant T7 RNA Polymerase GP1(Lys222)  
TITLE OF INVENTION: Exhibiting Altered Promoter Recognition  
NUMBER OF SEQUENCES: 23  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Deveau, Colton, and Marquis  
STREET: Two Midtown Plaza, Suite 1400,  
STREET: 1360 Peachtree St., NE  
CITY: Atlanta  
STATE: Georgia  
COUNTRY: USA  
ZIP: 30309  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.50 Inch, 1.4 MB Storage  
COMPUTER: Apple Macintosh  
OPERATING SYSTEM: Macintosh 7.1  
SOFTWARE: Microsoft Word 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/106,433A  
FILING DATE: 08/13/93  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: No. 5385834 Applicable  
FILING DATE: No. 5385834 Applicable  
ATTORNEY/AGENT INFORMATION:  
NAME: Colton, Laurence P.  
REGISTRATION NUMBER: Reg. No. 5385834 33,371  
REFERENCE/DOCKET NUMBER: 10733-101  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 404-875-8817  
TELEFAX: 404-875-8505  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 5110 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: circular  
MOLECULE TYPE: other nucleic acid  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
FRAGMENT TYPE: NO. 5385834 applicable  
ORIGINAL SOURCE:  
ORGANISM: NO. 5385834 applicable  
STRAIN: NO. 5385834 applicable  
INDIVIDUAL ISOLATE: NO. 5385834 applicable  
DEVELOPMENTAL STAGE: NO. 5385834 applicable  
HAPLOTYPE: NO. 5385834 applicable  
TISSUE TYPE: NO. 5385834 applicable  
CELL TYPE: NO. 5385834 applicable  
ORGANELLE: NO. 5385834 applicable  
IMMEDIATE SOURCE:  
LIBRARY: NO. 5385834 applicable  
CLONE: pcm-T720  
POSITION IN GENOME:  
CHROMOSOME/SEGMENT: NO. 5385834 applicable  
MAP POSITION: NO. 5385834 applicable  
UNITS: NO. 5385834 applicable  
FEATURE:  
NAME/KEY: Inactive T7 f10 promoter mutant (-9C to A) located between nucle  
LOCATION: 198 to 220  
IDENTIFICATION METHOD: The clone was constructed from  
IDENTIFICATION METHOD: PKR232-8 and the inserted "promoter" was sequenced.  
OTHER INFORMATION: If the mutant T7 promoter between positions 198 and 220  
PUBLICATION INFORMATION:  
AUTHORS: Ikeda, R.A., Chang, L.L., and Warshamana, G.S.  
TITLE: Selection and Characterization of a Mutant T7  
TITLE: RNA Polymerase that Recognizes an Expanded Range  
TITLE: of T7-like Promoters  
JOURNAL: Biochemistry

CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/106.433A  
 FILING DATE: 08/13/93  
 CLASSIFICATION: 435  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: No. 5385834 Applicable  
 FILING DATE: No. 5385834 Applicable  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Deveau, Colton, and Marquis  
 NAME: Colton, Laurence P.  
 REGISTRATION NUMBER: Reg. No. 5385834 33,371  
 REFERENCE/DOCKET NUMBER: 10733-161  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 404-875-8817  
 TELEFAX: 404-875-8505  
 INFORMATION FOR SEQ ID NO: 9:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 5110 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: double  
 TOPOLOGY: circular  
 MOLECULE TYPE: other nucleic acid  
 HYPOTHETICAL: NO  
 ANTI-SENSE: NO  
 FRAGMENT TYPE: No. 5385834 applicable  
 ORIGINAL SOURCE:  
 ORGANISM: No. 5385834 applicable  
 STRAIN: No. 5385834 applicable  
 INDIVIDUAL ISOLATE: No. 5385834 applicable  
 DEVELOPMENTAL STAGE: No. 5385834 applicable  
 HAPLOTYPE: No. 5385834 applicable  
 TISSUE TYPE: No. 5385834 applicable  
 CELL TYPE: No. 5385834 applicable  
 ORGANELLE: No. 5385834 applicable  
 IMMEDIATE SOURCE:  
 LIBRARY: No. 5385834 applicable  
 CLONE: pCM-P1087  
 POSITION IN GENOME:  
 CHROMOSOME/SEGMENT: No. 5385834 applicable  
 MAP POSITION: No. 5385834 applicable  
 UNITS: No. 5385834 applicable  
 FEATURE:  
 NAME/KEY: Inactive T7 f10 promoter mutant (-9C to T) located between nucle  
 LOCATION: 198 to 220  
 IDENTIFICATION METHOD: The clone was constructed from  
 IDENTIFICATION METHOD: PKR232-8 and the inserted "promoter" was sequenced.  
 OTHER INFORMATION: If the mutant T7 promoter between positions 198 and 220  
 PUBLICATION INFORMATION:  
 AUTHORS: Ikeda, R.A., Chang, L.L., and Marhamana, G. S.  
 TITLE: Selection and Characterization of a Mutant T7  
 TITLE: RNA Polymerase that Recognizes an Expanded Range  
 TITLE: of T7-like Promoters  
 JOURNAL: Biochemistry  
 VOLUME: 32  
 ISSUE: 35  
 PAGES: 9115-9124  
 DATE: Sept. 7, 1993  
 DOCUMENT NUMBER:  
 FILING DATE:  
 PUBLICATION DATE:  
 RELEVANT RESIDUES IN SEQ ID NO: 1 to 5110  
 US-08-106-433A-9

Query Match	22.5%	Score 404	DB 1	Length 5110
Best Local Similarity	96.5%	Pred. NO. 8.9e-91		
Matches 413	Conservative	0	Mismatches 15	Indels 0
Gaps				0
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[illegible]

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1  RESULT      8
2  US-08-106-433A-10
3  ? Sequence 10 Application US/08106433A
4  ? Patent No. 5385834
5  ?
6  ? GENERAL INFORMATION:
7  ? APPLICANT: Richard A. Ikeda
8  ? TITLE OF INVENTION: Mutant T7 RNA Polymerase GpI(Ty222)
9  ? TITLE OF INVENTION: Exhibiting Altered Promoter Recognition
10 ? NUMBER OF SEQUENCES: 23
11 ?
12 ? CORRESPONDENCE ADDRESS:
13 ? ADDRESSEE: Deveau, Colton, and Marquis
14 ? STREET: Two Midtown Plaza, Suite 1400,
15 ? STREET: 1360 Peachtree St., NE
16 ? CITY: Atlanta
17 ? STATE: Georgia
18 ? COUNTRY: USA
19 ?
20 ? ZIP: 30309
21 ?
22 ? COMPUTER READABLE FORM:
23 ? MEDIUM TYPE: Disquette, 3.50 inch, 1.4 MB Storage
24 ?
25 ? COMPUTER: Apple Macintosh
26 ? OPERATING SYSTEM: McIntosh 7.1
27 ? SOFTWARE: Microsoft Word 5.1
28 ?
29 ? CURRENT APPLICATION DATA:
30 ? APPLICATION NUMBER: US/08/106,433A
31 ? FILING DATE: 08/13/93
32 ?
33 ? CLASSIFICATION: 435
34 ?
35 ? PRIOR APPLICATION DATA:
36 ? APPLICATION NUMBER: No. 5385834 Applicable
37 ? FILING DATE: No. 5385834 Applicable
38 ? ATTORNEY/AGENT INFORMATION:
39 ? NAME: Deveau, Colton, and Marquis
40 ? NAME: Colton, Laurence P.
41 ? REGISTRATION NUMBER: Reg. No. 5385834 33,371
42 ? REFERENCE/DOCKET NUMBER: 10733-161
43 ? TELECOMMUNICATION INFORMATION:
44 ? TELEPHONE: 404-875-8817
45 ? TELEFAX: 404-875-8505
46 ?
47 ? INFORMATION FOR SEQ ID NO: 10:
48 ? SEQUENCE CHARACTERISTICS:
49 ? LENGTH: 5110 base pairs
50 ? TYPE: nucleic acid
51 ? STRANDEDNESS: double
52 ?

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TOPOLOGY: circular  
MOLECULE TYPE: other nucleic acid  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
FRAGMENT TYPE: NO. 5385834 applicable  
ORIGINAL SOURCE: ORGANISM: NO. 5385834 applicable  
STRAIN: NO. 5385834 applicable  
INDIVIDUAL ISOLATE: NO. 5385834 applicable  
DEVELOPMENTAL STAGE: NO. 5385834 applicable  
HAPLOTYPE: NO. 5385834 applicable  
TISSUE TYPE: NO. 5385834 applicable  
CELL TYPE: NO. 5385834 applicable  
ORGANELLE: NO. 5385834 applicable  
IMMEDIATE SOURCE: LIBRARY: NO. 5385834 applicable  
CLONE: PCM-P1198  
POSITION IN GENOME: CHROMOSOME/SEGMENT: NO. 5385834 applicable  
MAP POSITION: NO. 5385834 applicable  
UNITS: No. 5385834 applicable  
FEATURE: NAME/KEY: Intermediate T7 f10 promoter mutant (-8T to G) located between n  
LOCATION: 198 to 220  
IDENTIFICATION METHOD: The clone was constructed from  
IDENTIFICATION METHOD: pKK232-8 and the inserted "promoter" was sequenced.  
OTHER INFORMATION: The mutant T7 promoter between positions 198 and 220 is  
PUBLICATION INFORMATION: AUTHORS: Ikeda, R.A., Chang, L.L., and Marsham, G.S.  
TITLE: Selection and Characterization of a Mutant T7  
TITLE: RNA Polymerase that Recognizes an Expanded Range  
JOURNAL: Biochemistry  
VOLUME: 32  
ISSUE: 35  
PAGES: 9115-9124  
DATE: Sept. 7, 1993  
DOCUMENT NUMBER: FILING DATE:  
PUBLICATION DATE:  
DOCUMENT NUMBER:  
FILING DATE:  
PUBLICATION DATE:  
RELEVANT RESIDUES IN SEQ ID NO: 1 to 5110  
US-08-106-433A-10

Query Match 22.5%; Score 404; DB 1; Length 5110;  
Best Local Similarity 96.5%; Pred.No.8.9e-91;  
Matches 413; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

QY 1267 agagtcgacgtgacgagcatgcaagcttggtccacatgacccatgacgagcaag 1326  
1251 AGAATTTGCTGGCGGAGAGCGCGGTGTCCACTGACCCCATGCCAATCTCAAG 1310  
QY 1327 tgaacgcgtagcgcgatgtagtgtggtgtccccaatgagagtaggaactgcc 1386  
1311 TGAACGCCGTAGCGCGATGTGTGCGGTCTCCCATCGGAAGTAGGGAAGTCC 1370  
QY 1387 aggcataaataaagaaagctcagtcgaagactggccttctgttactctgtt 1446  
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QY 1447 ttcggtgaacgctctcctgaatagaacaacccgcgcgagcgagattgaacgttcg 1506  
1431 TTCTGCTGTAAGCCTCTCTCGAGTAGAGACAATCCCGCGGACGGATTGAACGTTGCG 1490  
QY 1507 aagcaacgcccggagggtggtggcgagagcgccgcgcataaactgccaggaatc 1566  
1491 AAGCAACGCGCCGAGGAGGTGGCGGAGGAGCCCGCATAACTGCCAGCATCAATTT 1550  
QY 1567 aagcaaaaggccatcctgaacgagtgccctttggcgttttacaactcttctgtcgc 1626

Db 1551 AAGCAGAGGCCATCTGACGATGGCCTTTTGGCTTTCTACAACTCTCTGTCGC 1610  
QY 1627 atatacaagccatcccccacagatacgttaactgctcgttttgcacaggaag 1686  
Db 1611 ATATCTACAAGCCATCCCGCCACAGATACGGTAACGCTGTTTTCATCAGGAA 1670  
QY 1687 gcagcat 1694  
Db 1671 GCAGCTCT 1678

RESULT 9  
US-08-106-433A-11  
Sequence 11, Application US/08106433A  
Patent No. 5385834  
GENERAL INFORMATION:  
APPLICANT: Richard A. Ikeda  
TITLE OF INVENTION: Mutant T7 RNA Polymerase GP1(Lys222)  
TITLE OF INVENTION: Exhibiting Altered Promoter Recognition  
NUMBER OF SEQUENCES: 23  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Deveau, Colton, and Marquis  
STREET: Two Midtown Plaza, Suite 1400,  
STREET: 1360 Peachtree St., NE  
CITY: Atlanta  
STATE: Georgia  
COUNTRY: USA  
ZIP: 30309  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.50 inch, 1.4 Mb Storage  
COMPUTER: Apple Macintosh  
OPERATING SYSTEM: Macintosh 7.1  
SOFTWARE: Microsoft Word 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/106,433A  
FILING DATE: 08/13/93  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: NO. 5385834 Applicable  
FILING DATE: NO. 5385834 Applicable  
ATTORNEY/AGENT INFORMATION:  
NAME: Deveau, Colton, and Marquis  
NAME: Colton, Laurence P.  
REGISTRATION NUMBER: Reg. No. 5385834 33,371  
REFERENCE/DOCKET NUMBER: 10733-161  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 404-875-8817  
TELEFAX: 404-875-8505  
INFORMATION FOR SEQ ID NO: 11:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 5110 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: circular  
MOLECULE TYPE: other nucleic acid  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
FRAGMENT TYPE: NO. 5385834 applicable  
ORIGINAL SOURCE: ORGANISM: NO. 5385834 applicable  
STRAIN: NO. 5385834 applicable  
INDIVIDUAL ISOLATE: NO. 5385834 applicable  
DEVELOPMENTAL STAGE: NO. 5385834 applicable  
HAPLOTYPE: NO. 5385834 applicable  
TISSUE TYPE: NO. 5385834 applicable  
CELL TYPE: NO. 5385834 applicable  
ORGANELLE: NO. 5385834 applicable  
IMMEDIATE SOURCE: LIBRARY: NO. 5385834 applicable  
CLONE: PCM-T286  
POSITION IN GENOME: CHROMOSOME/SEGMENT: NO. 5385834 applicable  
MAP POSITION: NO. 5385834 applicable





DOCUMENT NUMBER:  
FILING DATE:  
PUBLICATION DATE:  
RELEVANT RESIDUES IN SEQ ID NO: 1 to 5110  
US-08-106-433A-12

Query Match 22.5%; Score 404; DB 1; Length 5110;  
Best Local Similarity 96.5%; Pred. No. 8.9e-91;  
Matches 413; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

QY 1267 agagtcgacctgacgcatgcaagcttggtgtccacctgaccccatgacgaactcagaag 1326  
DB 1251 AGAATTTGCTGGCGGAGAGCGCGGTGTCCCACTGACCCCATGCCAATCGACAAG 1310  
QY 1327 tgaacgcccgtacgcccgaatgtagtgggtgtcccccacatgagagtaggaactgcc 1386  
DB 1311 TGAACGCCGTACGCCGAGTGTGTGGGTCTCCCATGCGAGAGTAGGGAACCTGCC 1370  
QY 1387 aggcatacaataaagaaagctcagtcgaagactgggcttctgttatactgtgt 1446  
DB 1371 AGGCATCAATATAAAGAAAGCTCAGTCGAAGAGCTGGCCCTTGTATCTGTGT 1430  
QY 1447 ttgtgtgtgaagctctctctgagtagaacaatccgcccggagcggatattggaactgtgcg 1506  
DB 1431 TTGTGCTGTAACCTCTCTCTGAGTAGACAAATCCCGGGAGCGGATTTGAACGTTGCG 1490  
QY 1507 aagcaacgcccggaggtgtggtgagcagagacgcccgcataaactgcaagcatcaaat 1566  
DB 1491 AAGCAACGCCGCCGAGGAGGTGGCGGAGACGCCGCCCAATMAACTGCAAGCATCAAAAT 1550  
QY 1567 aagcagaagcgcatactcagcagatgagccttttgcgtttctacaactcttctgtgc 1626  
DB 1551 AAGCAGAAGGCCATCCTGAGAGGATGCGCTTTTGTCTCAAACTCTTCTGTCGT 1610  
QY 1627 atatcacaagcattcccccacagatacgttaactagctgtttgttcacagaa 1686  
DB 1611 ATATCTACAGCCATCCCCACAGATACGTTAACTAGCTGTTTTGTCATCAGAGAA 1670  
QY 1687 gcagcat 1694  
DB 1671 GCAGCTGT 1678

RESULT 11  
US-08-106-433A-13  
Sequence 13, Application US/08106433A  
Patent No. 5385834  
GENERAL INFORMATION:  
APPLICANT: Richard A. Ikeda  
TITLE OF INVENTION: Mutant T7 RNA Polymerase GP1(Lys222)  
TITLE OF INVENTION: Exhibiting Altered Promoter Recognition  
NUMBER OF SEQUENCES: 23  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Deveau, Colton, and Marquis  
STREET: Two Midtown Plaza, Suite 1400,  
STREET: 1360 Peachtree St., NE  
CITY: Atlanta  
STATE: Georgia  
COUNTRY: USA  
ZIP: 30309  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette, 3.50 inch, 1.4 Mb Storage  
COMPUTER: Apple Macintosh  
OPERATING SYSTEM: Macintosh 7.1  
SOFTWARE: Microsoft Word 5.1  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/106,433A  
FILING DATE: 08/13/93  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: No. 5385834 Applicable  
FILING DATE: No. 5385834 Applicable

ATTORNEY/AGENT INFORMATION:  
NAME: Deveau, Colton, and Marquis  
NAME: Colton, Laurence P.  
REGISTRATION NUMBER: Reg. No. 5385834 33,371  
REFERENCE/DOCKET NUMBER: 10733-161  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 404-875-8817  
TELEFAX: 404-875-8505  
INFORMATION FOR SEQ ID NO: 13:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 5110 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: circular  
MOLECULE TYPE: other nucleic acid  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
FRAGMENT TYPE: No. 5385834 applicable  
ORIGINAL SOURCE:  
ORGANISM: No. 5385834 applicable  
STRAIN: No. 5385834 applicable  
INDIVIDUAL ISOLATE: No. 5385834 applicable  
DEVELOPMENTAL STAGE: No. 5385834 applicable  
HAPLOTYPE: No. 5385834 applicable  
TISSUE TYPE: No. 5385834 applicable  
CELL TYPE: No. 5385834 applicable  
ORGANELLE: No. 5385834 applicable  
IMMEDIATE SOURCE:  
LIBRARY: No. 5385834 applicable  
CLONE: PCM-P1208  
POSITION IN GENOME:  
CHROMOSOME/SEGMENT: No. 5385834 applicable  
MAP POSITION: No. 5385834 applicable  
UNITS: No. 5385834 applicable  
FEATURE:  
NAME/KEY: Inactive T7 f10 promoter mutant (-7C to G) located between nucle  
LOCATION: 198 to 220  
IDENTIFICATION METHOD: The clone was constructed from  
IDENTIFICATION METHOD: PKK232-8 and the inserted "promoter" was sequenced.  
OTHER INFORMATION: If the mutant T7 promoter between positions 198 and 220  
PUBLICATION INFORMATION:  
AUTHORS: Ikeda, R. A., Chang, L. L., and Marshman, G. S.  
TITLE: Selection and Characterization of a Mutant T7  
TITLE: RNA Polymerase that Recognizes an Expanded Range  
JOURNAL: Biochemistry  
VOLUME: 32  
ISSUE: 35  
PAGES: 9115-9124  
DATE: Sept. 7, 1993  
DOCUMENT NUMBER:  
FILING DATE:  
PUBLICATION DATE:  
DOCUMENT NUMBER:  
FILING DATE:  
PUBLICATION DATE:  
RELEVANT RESIDUES IN SEQ ID NO: 1 to 5110  
US-08-106-433A-13

Query Match 22.5%; Score 404; DB 1; Length 5110;  
Best Local Similarity 96.5%; Pred. No. 8.9e-91;  
Matches 413; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

QY 1267 agagtcgacctgacgcatgcaagcttggtgtccacctgaccccatgacgaactcagaag 1326  
DB 1251 AGAATTTGCTGGCGGAGAGCGCGGTGTCCCACTGACCCCATGCCAATCGACAAG 1310  
QY 1327 tgaacgcccgtacgcccgaatgtagtgggtgtcccccacatgagagtaggaactgcc 1386  
DB 1311 TGAACGCCGTACGCCGAGTGTGTGGGTCTCCCATGCGAGAGTAGGGAACCTGCC 1370  
QY 1387 aggcatacaataaagaaagctcagtcgaagactgggcttctgttatactgtgt 1446

|||||  
Db 1371 AGGATCAATAAAGAAAGGCTCAGTCGAAGACTGGCCCTTTCGTTTATCTGTGT 1430  
Qy 1447 ttgtcgtgaaagcgtctctctctgaagtaagacaatcccgaggagagatgtaagcgttcg 1506  
Db 1431 ttgtcgtgaaagcgtctctctctgaagtaagacaatcccgaggagagatgtaagcgttcg 1490  
Qy 1507 aagcaagagcccgaggaggtgctgagcggaagcccgacataactgccaagcatcaatt 1566  
Db 1491 AAGCAAGCGCCCGAGAGGTGGCGGAGAGAGCCCGCATTAAGTCCAGGATCAAAAT 1550  
Qy 1567 aagcaagagcccgagcctgaagcgtgagcctttgctgttctacaactctctctgctc 1626  
Db 1551 AAGCAGAAGCCATCTGACGCGATGGCCTTTTGGGTTTCTAACAAACTCTCTGTCGTC 1610  
Qy 1627 atatctaaagcctccccccacagataagcgttaactagcctgtttgtcataagaa 1686  
Db 1611 ATATCTACAAGCCATCCCGCCACAGATAGGTAAGCTGCTGTTTGGATCAGGAAA 1670  
Qy 1687 gcaagcat 1694  
Db 1671 GCAGCTGT 1678

RESULT 12  
US-08-106-433A-14  
: Sequence 14, Application US/08106433A  
: Patent No. 5385834  
: GENERAL INFORMATION:  
: APPLICANT: Richard A. Ikeda  
: TITLE OF INVENTION: Mutant T7 RNA Polymerase GP1(Lys222)  
: TITLE OF INVENTION: Exhibiting Altered Promoter Recognition  
: NUMBER OF SEQUENCES: 23  
: CORRESPONDENCE ADDRESS:  
: ADDRESSEE: Deveau, Colton, and Marquis  
: STREET: Two Midtown Plaza, Suite 1400,  
: STREET: 1360 Peachtree St., NE  
: CITY: Atlanta  
: STATE: Georgia  
: COUNTRY: USA  
: ZIP: 30309  
: COMPUTER READABLE FORM:  
: MEDIUM TYPE: Diskette, 3.50 inch, 1.4 MB Storage  
: COMPUTER: Apple Macintosh  
: OPERATING SYSTEM: McIntosh 7.1  
: SOFTWARE: Microsoft Word 5.1  
: CURRENT APPLICATION DATA:  
: APPLICATION NUMBER: US/08/106,433A  
: FILING DATE: 08/13/93  
: CLASSIFICATION: 435  
: PRIOR APPLICATION DATA:  
: APPLICATION NUMBER: No. 5385834 Applicable  
: FILING DATE: No. 5385834 Applicable  
: ATTORNEY/AGENT INFORMATION:  
: NAME: Deveau, Colton, and Marquis  
: NAME: Colton, Laurence P.  
: REGISTRATION NUMBER: Reg. No. 5385834 33,371  
: TELEPHONE: 404-875-8817  
: TELEFAX: 404-875-8505  
: INFORMATION FOR SEQ ID NO: 14:  
: SEQUENCE CHARACTERISTICS:  
: LENGTH: 5110 base pairs  
: TYPE: nucleic acid  
: STRANDEDNESS: double  
: TOPOLOGY: circular  
: MOLECULE TYPE: other nucleic acid  
: HYPOTHETICAL: NO  
: ANTI-SENSE: NO  
: FRAGMENT TYPE: No. 5385834 applicable  
: ORIGINAL SOURCE:  
: ORGANISM: No. 5385834 applicable

STRAIN: No. 5385834 applicable  
INDIVIDUAL ISOLATE: No. 5385834 applicable  
DEVELOPMENTAL STAGE: No. 5385834 applicable  
HAPLOTYPE: No. 5385834 applicable  
TISSUE TYPE: No. 5385834 applicable  
CELL TYPE: No. 5385834 applicable  
ORGANELLE: No. 5385834 applicable  
IMMEDIATE SOURCE:  
LIBRARY: No. 5385834 applicable  
CLONE: pCM-P1031  
POSITION IN GENOME:  
CHROMOSOME/SEGMENT: No. 5385834 applicable  
MAP POSITION: No. 5385834 applicable  
UNITS: No. 5385834 applicable  
FEATURE:  
NAME/KEY: Inactive T7 f10 promoter mutant (-7C to A) located between nucle  
LOCATION: 198 to 220  
IDENTIFICATION METHOD: The clone was constructed from  
IDENTIFICATION METHOD: PKR32-8 and the inserted "promoter" was sequenced.  
OTHER INFORMATION: If the mutant T7 promoter inserted between positions 198 and 220  
PUBLICATION INFORMATION:  
AUTHORS: Ikeda, R.A., Chang, L.L., and Marshamane, G.S.  
TITLE: Selection and Characterization of a Mutant T7  
TITLE: RNA Polymerase that Recognizes an Expanded Range  
JOURNAL: Biochemistry  
VOLUME: 32  
ISSUE: 35  
PAGES: 9115-9124  
DATE: Sept. 7, 1993  
DOCUMENT NUMBER:  
FILING DATE:  
PUBLICATION DATE:  
DOCUMENT NUMBER:  
FILING DATE:  
PUBLICATION DATE:  
RELEVANT RESIDUES IN SEQ ID NO: 1 to 5110  
US-08-106-433A-14

Query Match 22.5%; Score 404; DB 1; Length 5110;  
Best Local Similarity 96.5%; Pred. No. 8.9e-91;  
Matches 413; Conservative 0; Mismatches 15; Indels 0; Gaps 0;

Qy 1267 agagcgcagcctgcagcagcagcagcagcagcagcagcagcagcagcagcagcagcagc 1326  
Db 1251 AGAATTTGCTGGCGGCGAGTACGAGCGGCGGTGCCACCTGACCCCTGCGAAGTCAAGAG 1310  
Qy 1327 tgaacgcgcgtagcgcgcgtagcgtggtggtgtcccatgcagcagcagcagcagcagcagc 1386  
Db 1311 TGAACGCCGTAGCGCCGATGATGTGCGGTCTCCCATGCGAGAGTAAAGGAATCTGCC 1370  
Qy 1387 aggcatacaataaagaaagcagcagcagcagcagcagcagcagcagcagcagcagcagc 1446  
Db 1371 AGGATCAATAAAGAAAGGCTCAGTCGAAGAGCTGGCCTTTCGTTTATCTGTGT 1430  
Qy 1447 ttgtcgtgaaagcgtctctctctgaagtaagacaatcccgaggagagatgtaagcgttcg 1506  
Db 1431 ttgtcgtgaaagcgtctctctctgaagtaagacaatcccgaggagagatgtaagcgttcg 1490  
Qy 1507 aagcaagagcccgaggaggtgctgagcggaagcccgacataactgccaagcatcaatt 1566  
Db 1491 AAGCAAGCGCCCGAGAGGTGGCGGAGAGAGCCCGCATTAAGTCCAGGATCAAAAT 1550  
Qy 1567 aagcaagagcccgagcctgaagcgtgagcctttgctgttctacaactctctctgctc 1626  
Db 1551 AAGCAGAAGCCATCTGACGCGATGGCCTTTTGGGTTTCTAACAAACTCTCTGTCGTC 1610  
Qy 1627 atatctaaagcctccccccacagataagcgttaactagcctgtttgtcataagaa 1686  
Db 1611 ATATCTACAAGCCATCCCGCCACAGATAGGTAAGCTGCTGTTTGGATCAGGAAA 1670  
Qy 1687 gcaagcat 1694





Job time: 157 sec

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